

In the Claims:

106. (Currently amended.) A selectively configured porous particulate material comprising a porous particulate material having inherent or induced permeability and which is selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, wherein the apparent specific gravity of the selectively configured porous particulate material is less than the apparent specific gravity of the porous particulate material.

107. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the porous particulate material is a natural or non-natural porous ceramic.

108. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material exhibits crush resistance under conditions as high as 10,000 psi closure stress.

109. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the porous particulate material has a porosity and permeability such that a fluid may be drawn at least partially into its matrix by capillary action.

110. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the porous particulate material has a porosity and permeability such that a penetrating material may be drawn at least partially into its matrix using a vacuum and/or may be forced at least partially into its porous matrix under pressure.

111. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material is a porous particulate material treated with a liquid resin, plastic, cement, sealant or binder.

112. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material is a porous particulate material treated with a phenol, phenol formaldehyde, melamine formaldehyde, urethane or epoxy resin.

113. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material is a porous particulate material treated with nylon, polyethylene, polystyrene or a mixture thereof.

114. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material is a porous particulate material treated with a penetrating, coating and/or glazing material which is capable of trapping or encapsulating a fluid having an apparent specific gravity less than the apparent specific gravity of the matrix of the porous particulate material.

115. (Previously presented.) The selectively configured porous particulate material of Claim 114, wherein the fluid is a gas.

116. (Previously presented.) The selectively configured porous particulate material of Claim 106, having a size between from about 200 mesh to about 8 mesh.

117. (Previously presented.) The selectively configured porous particulate material of Claim 107, wherein the selectively configured porous particulate material is a porous particulate material treated with a coating or penetrating material, wherein the coating or penetrating material is present in an amount of from about 0.5 to about 10% by weight of total weight of the selectively configured porous particulate material.

118. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material is a porous particulate material having a coating layer, wherein the thickness of the coating layer is from about 1 to about 5 microns.

119. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the permeability of the selectively configured porous particulate material is less than the permeability of the porous particulate material.

120. (Previously presented.) The selectively configured porous particulate material of Claim 106, wherein the selectively configured porous particulate material comprises a multitude of the porous particulate material bond together.

121. (Previously presented.) The selectively configured porous particulate material of Claim 120, wherein the multitude of the porous particulate material is coated or penetrated with a curable resin.

122. (Previously presented.) The selectively configured porous particulate material of Claim 120, wherein individual particles of the porous particulate material have a maximum length-based aspect ratio of equal to or less than about 5.

123. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 106 and a carrier fluid.

124. (Previously presented.) The composition of Claim 123, wherein the porous particulate material of the selectively configured porous particulate material is relatively lightweight and/or substantially neutrally buoyant.

125. (Previously presented.) The composition of Claim 123, wherein the carrier fluid is non-gelled.

126. (Previously presented.) The composition of Claim 123, wherein the carrier fluid is a completion or workover brine.

127. (Previously presented.) The composition of Claim 123, wherein the carrier fluid is salt water, fresh water, a liquid hydrocarbon, or a gas or a mixture thereof.

128. (Previously presented.) The composition of Claim 127, wherein the gas is nitrogen or carbon dioxide.

129. (Previously presented.) The composition of Claim 123, further comprising at least one member selected from the group consisting of gelling agents, crosslinking agents, gel breakers, surfactants, foaming agents, demulsifiers, buffers, clay stabilizers, acids and mixtures thereof.

130. (Currently amended.) A selectively configured porous particulate material comprising a porous particulate material having inherent or induced permeability and which is selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, wherein the strength of the selectively configured porous particulate material is greater than the strength of the porous particulate material.

131. (Previously presented.) The selectively configured porous particulate material of Claim 130, wherein the porous particulate material has a porosity and permeability such that a fluid may be drawn at least partially into its matrix by capillary action.

132. (Previously presented.) The selectively configured porous particulate material of Claim 130, wherein the selectively configured porous particulate material comprises a porous particulate material coated or penetrated with a liquid resin, plastic, cement, sealant or binder.

133. (Previously presented.) The selectively configured porous particulate material of Claim 130, wherein the apparent specific gravity of the selectively configured porous particulate material is less than the apparent specific gravity of the porous particulate.

134. (Previously presented.) A selectively configured porous particulate material comprising a porous particulate material selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, wherein the porous matrix of the selectively configured porous particulate material is at least partially filled with a gas.

135. (Previously presented.) The selectively configured porous particulate material of Claim 134, wherein the porous particulate material is substantially neutrally buoyant.

136. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 134 and a carrier fluid.

137. (Previously presented.) A selectively configured porous particulate material comprising a porous particulate material treated or modified with a glazing material.

138. (Previously presented.) The selectively configured porous particulate material of Claim 137, wherein the apparent density or apparent specific gravity of the selectively configured porous particulate material is less than the apparent density or apparent specific gravity of the porous particulate material.

139. (Previously presented.) The selectively configured porous particulate material of Claim 137, wherein the glazed surface enhances the ease of multi-phase fluid flow through a particulate pack.

140. (Previously presented.) The selectively configured porous particulate material of Claim 137, wherein the glazed surface of the porous particulate material enhances the ease of high rate turbulent gas flow through a particulate pack.

141. (Previously presented.) A selectively configured porous particulate material comprising a porous particulate material selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, wherein a gas or a relatively lightweight fluid is encapsulated or entrapped within the pores of the particulate material.

142. (Previously presented.) The selectively configured porous particulate material of Claim 141, wherein the porosity and permeability of the porous particulate material

is such that a fluid may be drawn at least partially into the porous matrix of the selectively configured porous particulate material by capillary action.

143. (Previously presented.) The selectively configured porous particulate material of Claim 141, wherein the porous particulate material is treated with a penetrating or coating material.

144. (Previously presented.) The selectively configured porous particulate material of Claim 141, wherein the porous particulate material is relatively lightweight and/or substantially neutrally buoyant.

145. (Previously presented.) The selectively configured porous particulate material of Claim 141, wherein the porous particulate material is a porous ceramic.

146. (Previously presented.) The selectively configured porous particulate material of Claim 143, wherein the porous particulate material is coated or penetrated with a liquid resin, plastic, cement, sealant or binder.

147. (Previously presented.) The selectively configured porous particulate material of Claim 146, wherein the liquid resin, plastic, cement, sealer, or binder is selected from the group consisting of a phenol, phenol formaldehyde, melamine formaldehyde, urethane, epoxy resin, nylon, polyethylene, polystyrene or a combination thereof.

148. (Previously presented.) The selectively configured porous particulate material of Claim 146, wherein the liquid resin is a curable resin and further wherein the selectively configured porous particulate material comprises a multitude of coated particulates bond together.

149. (Previously presented.) The selectively configured porous particulate material of Claim 141, wherein the apparent specific gravity of the selectively configured porous particulate material is less than the apparent specific gravity of the porous particulate.

150. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 141 and a carrier fluid.

151. (Previously presented.) The composition of Claim 150, wherein the carrier fluid is non-gelled.

152. (Previously presented.) The composition of Claim 150, wherein the porous particulate of the selectively configured porous particulate material is relatively lightweight and/or substantially neutrally buoyant.

153. (Previously presented.) The composition of Claim 150, wherein the carrier fluid is a completion or workover brine.

154. (Previously presented.) The composition of Claim 150, wherein the carrier fluid is liquefied or foamed.

155. (Currently amended.) A selectively configured porous particulate material comprising a porous particulate material treated with a non-porous penetrating layer, coating layer or glazing material, the porous particulate material being selected from the group consisting of porous ceramics, polyolefins, styrene-divinylbenzene copolymers and polyalkylacrylate esters, wherein the apparent density or apparent specific gravity ~~porosity~~ of the selectively configured porous particulate material is less than the ~~porosity~~ apparent density or apparent specific gravity of the porous particulate material and further wherein the porous particulate material has inherent or induced permeability.

156. (Previously presented.) A composition comprising the selectively configured porous particulate material of Claim 155 and a carrier fluid.

157. (Previously presented.) The selectively configured porous particulate material of Claim 155, wherein the selectively configured porous particulate material is a porous particulate coated or penetrated with a liquid resin, plastic, cement, sealant or binder.

158. (Previously presented.) The selectively configured porous particulate material of Claim 155, wherein the porous particulate is coated or penetrated with a phenol, phenol formaldehyde, melamine formaldehyde, urethane or epoxy resin.

159. (Previously presented.) The composition of Claim 155, wherein the porous particulate material is a porous ceramic.

160. (Previously presented.) The selectively configured porous particulate material of Claim 114, wherein a clay stabilizer is applied to the exterior surface of the porous particulate material to inhibit penetration of the coating or penetrating material.